

**Notice of Allowability**

Application No.

09/964,270

Examiner

Kevin Quarterman

Applicant(s)

GUILLORN ET AL.

Art Unit

2879

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 May 2005.
2. ☒ The allowed claim(s) is/are 20,23-32 and 34-47.
3. ☒ The drawings filed on 26 September 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment and remarks received on 23 May 2005 have been entered.

### ***Allowable Subject Matter***

2. Claims 20, 23-32, and 34-47 are allowed.
3. The following is an examiner's statement of reasons for allowance: Applicant has amended the claims to better define the invention and argues that the applied prior art does not teach the claimed invention. Applicant's arguments in view of the amendments to the claims are persuasive.
4. Thus, regarding independent claim 20, the prior art of record neither shows or suggests an apparatus comprising, in addition to other limitations of the claim, first and second vertically aligned carbon nanofibers grown from first and second individually electrically addressable electrically conductive interconnects, wherein the first vertically aligned carbon nanofiber is individually electrically addressable via the first individually electrically addressable electrically conductive interconnect and the second vertically aligned carbon nanofiber is individually electrically addressable via the second individually electrically addressable electrically conductive interconnect. Due to their dependency upon independent claim 20, claims 23-32 and 34 are also allowable.
5. Regarding independent claim 35, the prior art of record neither shows or suggests a biosensor comprising, in addition to other limitations of the claim, first and second vertically aligned carbon nanofibers grown from first and second individually

Art Unit: 2879

electrically addressable electrically conductive interconnects, wherein the first vertically aligned carbon nanofiber is individually electrically addressable via the first individually electrically addressable electrically conductive interconnect and the second vertically aligned carbon nanofiber is individually electrically addressable via the second individually electrically addressable electrically conductive interconnect. Due to their dependency upon independent claim 35, claims 39-41 are also allowable.

6. Regarding independent claim 36, the prior art of record neither shows or suggests a field emitting array comprising, in addition to other limitations of the claim, first and second vertically aligned carbon nanofibers grown from first and second individually electrically addressable electrically conductive interconnects, wherein the first vertically aligned carbon nanofiber is individually electrically addressable via the first individually electrically addressable electrically conductive interconnect and the second vertically aligned carbon nanofiber is individually electrically addressable via the second individually electrically addressable electrically conductive interconnect. Due to their dependency upon independent 36, claims 42-44 are also allowable.

7. Regarding independent claim 37, the prior art of record neither shows or suggests a kit comprising, in addition to other limitations of the claim, first and second vertically aligned carbon nanofibers grown from first and second individually electrically addressable electrically conductive interconnects, wherein the first vertically aligned carbon nanofiber is individually electrically addressable via the first individually electrically addressable electrically conductive interconnect and the second vertically aligned carbon nanofiber is individually electrically addressable via the second

Art Unit: 2879

individually electrically addressable electrically conductive interconnect. Due to their dependency upon independent claim 37, claims 38 and 45-47 are also allowable.

8. The subject vertically aligned carbon nanofiber structure, as discussed earlier, is provided for improving response time of electrochemical probes. The design is new and unique to the art.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman  
Examiner  
Art Unit 2879

kq   
19 July 2005

  
Joseph Williams  
Primary Examiner  
Art Unit 2879